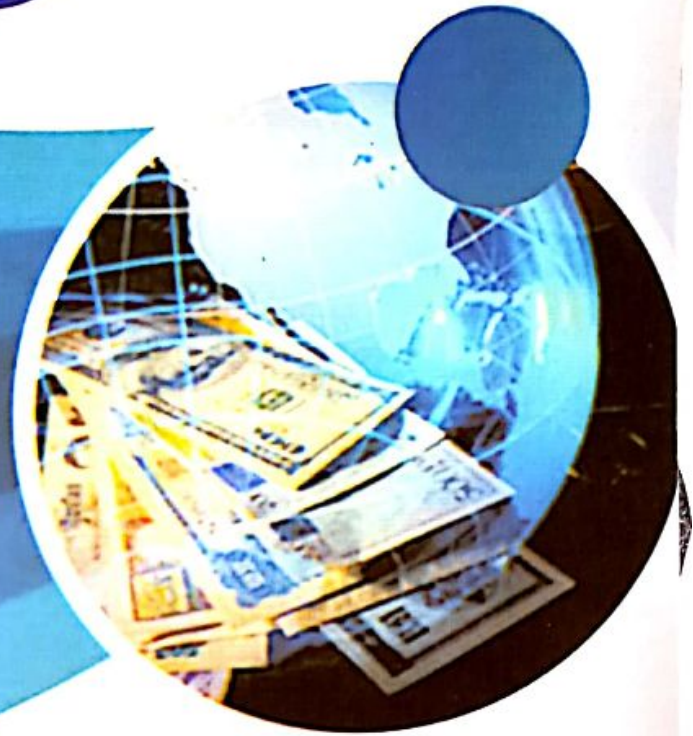




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Geography and Economics

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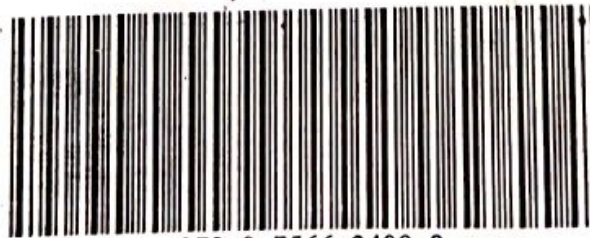
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PATTERN OF WORLD POPULATION GROWTH

It is estimated that 2020+ years ago the population of the world was about 300 million. For a very long time the world population did not grow significantly, with periods of growth followed by periods of decline. The population of the world grew from 1.6 billion in 1990, 6 billion at the beginning of 2000 and to more than 6.6 billion by 2008 (Poston and Bouvier, 2010). By the beginning of 2010, the world's population was getting close to 7 billion – that is almost one billion people added to the total world population in the space of a decade. Historically, it took more than 1600 years for the world population to double to 600 million in 1700, growing at an average annual rate of 0.8% to over 7.3 billion in 2015 (Maddison, 2001; World Bank, 2017; Wesley and Peterson, 2017). The United Nations 2019 population projection, opined that world population was expected to reach 9 billion by 2050. While by continent, Asia and Africa were projected to be the most populated regions by 2050 and 2100 respectively (See Figure 1).

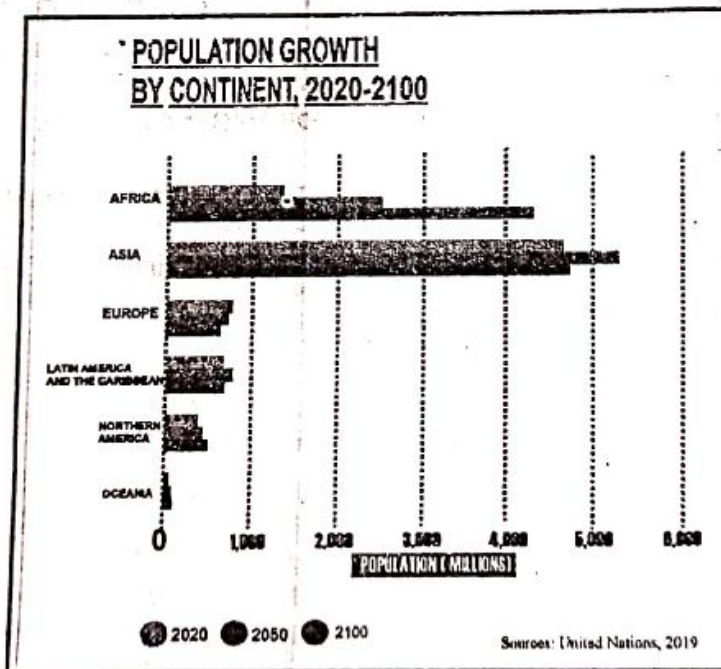


Figure 1: Understanding World Population Growth by Continent (2020–2100)

More importantly, Africa in 2013 with just over 17% of global population was projected to have the most growth globally (40%) by 2100 (Roser, 2013) even more than Asia having the largest population concentration. The period in years required for population to double, in developed and developing (are countries according to Mabogunje, [1980], where national and urban population growth and infant mortality rates remain high) worlds at an average annual growth rate during the 1930 to 2000 is equally shown in Table 1. The important point to the world population.

This is so as a result of the momentum created by the large population base. Population growth will be concentrated in certain regions; elsewhere, human numbers will stabilize or even decline. Equally worthy of note is that, the world population will continue to grow after 2050. Indeed, long-range population projections by the United Nations indicate population growth well into the 22nd century.

Table 1: Population Doubling Years at Average Growth Rate between 1930 and

Period	World	Developing Countries	Developed Countries
1930	-	-	-
1950	71	59	114
1970	32	32	61
1990	35	30	83
2000	39	32	108

Within countries, populations will also continue to shift from rural to urban areas, while becoming increasingly older and better educated. Migration between countries will be an increasingly important factor in international relations and the composition of national populations. This exceedingly rapid rate of population growth affirmed by several scholars, should of necessity be of a source of concern to humanity because of the increasingly difficult challenges in respect to human and physical resources such as agricultural production, fresh water stores, loss of diversity, diminishing oceanic fish catch and energy production, among others (Ehrlich, 1993; Gleick, 1997; Brown, *et al.*, 1998; Daily *et al.*, 1998; Wilson, 2002 and Orire, 2005) it often causes. High population growth may also impede opportunities for economic development, increased risk of health for women and children and as a matter of fact erode the quality of life by reducing access to education, nutrition, employment and source of resources such as portable water (BDHS, 2000; Orire and Olorunfemi, 2017)

Furthermore, it is worthy of note that the age structure of a population affects a nation's key socio-economic issues. For instance, the age structure has tremendous impact on economic growth, savings, investments, housing, taxation, consumption and intergenerational transfers (United Nations, 2002) as well as political and policy directions among others, both at the developing and developed world nations. A vivid example on the aforementioned structural pattern in age between these two world economic zones by the UN population prospects 2011 is shown in Figure 2.

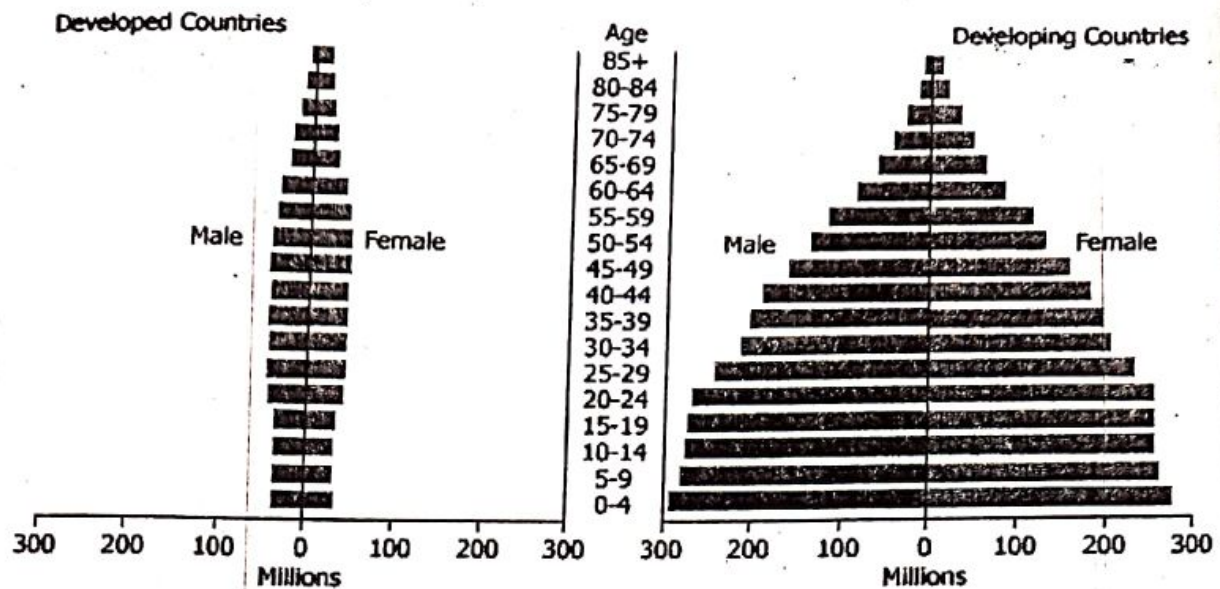


Figure 2: Age and Sex Structure of Developed and Developing Countries

Source: United Nations Population Division, World Population Prospects: The 2010 Revision, medium variant (2011). https://images.flatworldknowledge.com/berglee/berglee-fig01_025.jpg

WORLD POPULATION DISTRIBUTION

It is an established fact by scholars like Osoro (1991); Kendall, (1992), Wilson, 2002), and Speidel *et al.*, (2009) that most of the world's population growth occurs in poor developing nations and they are least able to support rapid population growth. However, this rapid growth of the world population is a recent phenomenon in the history of the world. The world population was estimated at 791 million in 1750, with 64% in Asia, 21% in Europe and 13% in Africa. Northern America was still nearly empty. By 1900, 150 years later, the world population had only slightly more than doubled, to 1.7 billion. The major growth had been in Europe, whose share had increased to 25%, and in Northern America and in Latin America, whose share had increased to 5% each.

Meanwhile the share of Asia had decreased to 57% and that of Africa to 8%. The growth of the world population accelerated after 1900, with 2.5 billion in 1950, a 53% increase in 50 years (UNESCO, 2010). Around this same time, countries like Belgium and the Philippines were reported by Van Bavel (2013), to have had more or less around 7 million people, and by 2000 both had clocked around 10 and 76 million people.

The rapid growth of the world population started in 1950, with a sharp reduction in mortality in the less developed regions (Van Bavel, 2013), resulting in an estimated population of 6.1 billion in the year 2000, nearly two-and-a-half times the population in 1950. With the declines in fertility in most of the world, the global growth rate of population has been decreasing since its peak of 2.0% in 1965-1970. In 1998, the world's population stood at 5.9 billion and is growing at 1.3% per year, or an annual net addition of 78 million people. Furthermore, the total world population reached 7 billion just after 2010. The United Nations had also projected that world population would have exceeded 8 billion by 2025 (United Nations, 2013).

In addition, according to the 'medium' population growth estimates and projections of the United Nations, by 2050 the world is expected to have 8.9 billion people, an increase of slightly less than half from the 2000 population. By then the share of Asia will have stabilized at 59%, that of Africa will have more than doubled, to 20%, and that of Latin America nearly doubled, to 9%. Meanwhile the share of Europe will decline to 7%, less than one third its peak level. While in 1900 the population of Europe was three times that of Africa, in 2050 the population of Africa will be nearly three times that of Europe (because more than half of global population growth between now and 2050 is expected to occur in Africa, United Nations, 2019).

POPULATION CHARACTERISTICS

Social and Economic Characteristics of Population.

Social and economic characteristics of population are very important as a result of the roles they play in population distribution, rate of growth, size of the family, pattern of consumption and production, demand for goods and services, and relationship between occupation and resources. The component of population such as age, sex, nationality, marital status, economic status, Religion etc., are all referred to as Components of Population. Some of these components are innate (in-born), i.e. they are predetermined e.g. Sex (M or F), Age, Home town etc. Some of these characteristics are required e.g. whether you want to have a family or not, in the society it comes a time that they expect someone to get into the marriage market. Some of these characteristics are also Individual i.e., pertaining to oneself (it is our choice) e.g. in marriage you choose whom to marry, what type of marriage to do, may be church, mosque or court etc. there are some of these characteristics that are Communal e.g. religion, race etc. all these characteristics are measurable. For any meaningful population study, you cannot ignore any of these characteristics.

- A. **Race:** The meaning of this depends on the definer. Scientists today have agreed that there is only one human race. Although, some still believe in the supremacy of race i.e., that their race is superior to other races. We also have race tension. Race is based upon biological inheritance. It is the sum total of the physical characteristics of our skin colour, shape of our skull, our nasal form, hair type (straight, curly, wavy), your blood group, your physical stature, the type and colour of our eye, and all these can be measured. In the view of this characteristics, the racial groups can be as follows:
- i. **Caucasoid:** are the so called whites. They are the people with fair to light brown skin, medium in stature, narrow to middle faces, straight wavy hairs, and long noses. This race is indigenous to the Europeans, Middle East, West Asia and North America.
 - ii. **Mongoloid:** they are the so called yellow people. They are yellow to reddish in skin colour. They are short to medium in stature, broad faced, small noses, and straight haired. They are found in Northern Asia, the Eskimos and the red Indians. They are the Japanese.
 - iii. **Negroid:** are the so called black people, with medium stature, medium width of faces, broad noses, and thick lips, coarse hair usually curly or wavy. We have them in Australia and indigenous to Africa.
 - iv. **Australoid:** "Australoid" was coined in ethnology in the mid-19th century describing the aboriginal people of Australia, Melanesia, and parts of Southeast Asia. These people are black, short in stature, long faced, full lips

found in South Asia and Southern part of India.

- v. **Capoid:** are yellowish-brown people, short in stature, flat faces, black haired, and some strange eye folds, found in South Africa, the Bushmen and Hottentots. Also, their women are identified with their big buttocks. Scholars like Vedder and Spannaus divided the Hottentots into Cape Hottentots, Korana, and Nama, and are considered as Hamitic race that had contacts with Arabs, Bantu, and Bushmen, and speaks three dialects of a common language (Dreyer, 1931).

These are the main races, although we also have the sub-races such as: Pigmyes who are the sub-race of the Negroid. Asiatic are the sub-race of Caucasoid. Apart from races, we still have the ethnic groups e.g. Yoruba, Igbo, Hausa etc., but we can also call them tribes. Within the ethnic groups, we have clans especially in Eastern Nigeria where they are referred as autonomous units. In the clan, we also have many families until we come to an individual.

- B. **Age:** Age affects all aspects of individual and communal land, as well as economic, social and political behavior. Age itself is affected by mortality, fertility and migration (this age is referred to as the age of the population). As important as age is, it is very difficult to obtain data about ages especially in illiterate societies as a result of ignorance, taboo, carelessness, and deliberate effort to falsify age. These are ways statistical technique on age data can be collected. For practical purposes, we classify age into 3 groups:

1. Infants and Adolescence (0 - 14; or 0 - 19);
2. Adults (could be 15 - 59; or 20 - 59); and
3. Aged (60 yrs. and above). These are the 3 age categories.

Economic Significance and Importance of these Age Groups

The criteria for this categorization is based on the contributions of each to the economy, their reproductive behavior, social well being etc.

Group I: Infants: are the non-productive and sometimes non-reproductive. In almost all societies, they are consumers, are normally taken care of, and are in school (always dependent). Notwithstanding few occasions where in some processes are reproductive. We can say about 90% of them are non-reproductive. In the less developed countries, the percentage of the infants or adolescence could be as high as 50%, while in developed societies, it could be about 30% or less in some areas.

Group II: Adults: They are the productive and reproductive group. They are the main producers, workers, are the group bearing children, they sustain the economy. The burden of society rests on them. In the developed countries, they account for between 50 - 55%, are economically active while in less developed societies could be as low as 40%.

Group III: Aged: are the retired people, non-productive although unlike the adolescents, their reproductive capacities are very low, i.e. the females are no longer reproductive, while the males are. We tend to have more women and they tend to live longer than men. Their percentage in the society i.e. in the developed countries are more than the developing countries because they don't have record of age, so they tend to guess their ages.

C. Sex: A combination of Age & Sex is very important indicator that have or involve a lot of planning. Thus, the construction of Age-Sex pyramid is very important. Note, that there are about 3 types of this pyramid. These are stationary, Regressive and Progressive shape of Age-Sex pyramid.

D. Marital Status: refers to the proportion of single, married, widowed and divorced persons. The relative proportion of the population in each of the mentioned categories varies from country to country. Marital status is affected by age, sex ratio and social institutions. It also depends on the prevailing economic conditions at a time.

a. The Single Population: This falls into three categories

- i.** Persons below the legal age of marriage. Legal age of marriage varies from country to country. For instance, the legal age of marriage in Nigeria is 18years (male and female), Japan is 20 (both male and female), Kenya is 18years, Germany ; 18years (male and female), Liberia; Female -18years and male 21years UK; 18years (male and female), India; female-18years and male 21 years, US; 18years (male and female) except Nebraska (19) and Mississippi (21)
- ii.** Unmarried adults desiring to marry at some time or the other.
- iii.** Celibates-vowed never to get married (reverend sisters and reverend fathers). The proportion of people in this category is increasing on daily basis as a result of socioeconomic changes and decline in the significance of marriage. The number is rising steadily in recent years which might be explained that the significance of marriage as a universal phenomenon is declining as a result of socio-economic changes.

b. Married population- There are three types of marriage

- i.** Monogamy.
- ii.** Polygamy (in most African countries significant proportion of the marital unions not recorded for demographic analysis).
- iii.** Polyandry

Each of these may be established legally depending on the society. However, polygamy could be in different forms to include polygyny and polyandry. Polygamous marriage is widely spread in African countries especially in Nigerian societies while monogamous is more spread in advanced countries.

- i.** Monogamous marriage: consists of the union of a single male and female. It is the commonest form of marriage among the Christian faith. It was accepted in England in the 17th century.
- ii.** Polygamy also known as polygyny marriage: consists of the union of one man to more than one wife. This form of marriage was accepted by the church and state before the middle of the 17th century. However, it is still acceptable to the Islamic faith (marriage to a maximum of four women at a time) and in many traditional societies the world over.
- iii.** Polyandry marriage: according to britannica.com is a term derived from the Greek *polys*, "many," and *aner, andros*, "man." This is a marriage of a woman to two or

more men at the same time. This form of marriage is not common but it is still practiced and understanding of the variables that define the term is said to still be evolving. It is as a result of fewer numbers of female than the male. Bride price is always high in this form of marriage. It is common in India and the Plateau of Tibet (a region shared by India, Nepal, and the Tibet Autonomous Region of China) and the Marquesas Islands in the South Pacific..

Other forms of marriage include:

- iv. **Fraternal Polyandry:** A situation whereby a woman marries more than one brother, the institution is called adelphic, or fraternal, polyandry. It is being practiced in some parts of India. Here, children are often said to be descended from the eldest brother alone, while in other cases fatherhood is established through a ceremony or the children are said to have descended from all the husbands equally.
- v. **Progressive Monogamy:** when a man marries a woman, after sometime divorces her and picks another woman again to marry. It is common in European countries.
- vi. **Sororal Marriage:** This is a marriage between a man and two sisters from the same parent usually marriage to deceased wife's sister (a widower marries a younger sister) or if the wife has proven infertile.

c. Widowhood

Widowhood affects both male and female depending on the death of the opposite sex and so widowhood is the state of having lost one's spouse to death. Becoming a widow is often a very detrimental and life changing time in a spouse's life. A widow is a woman whose husband has died while a widower is a man who lost his wife. There is the likelihood of women experiencing widowhood than men because men usually marry later than women. And note that one's risk of exposure to spousal death increases with age (Chen *et al.*, 2020). The numbers of widows in the world is more than widowers because men often re-marry after losing their spouses than women. Also, large population of the men have more than one wife. The implication of marriage to widows and widowers is that, widows want less child bearing while widowers start afresh. For example, in Britain year 1963, there were about 3million widows against 9,000 widowers both of which creates economic problem. When the husband is much older than the wife, the chance that the wife becomes a widow is very high. Meaning that women as opined by (Stroebe *et al.*, 2001; Shear *et al.*, 2013), tends to live longer and are more likely to experience bereavement than men. Generally, grief and bereavement responses due to the loss of a spouse increases vulnerability to psychological and physical illnesses (Buckley, 2012; Ramadas and Kuttichira, 2013).

d. Divorce:

This is very common in advanced societies while in traditional societies, it is termed as a taboo. In the Muslim community, divorce is allowed but frowned at. Divorce creates some societal problems and these could be psychological in nature for the children from broken marriages. It is common in urban areas than rural areas. The younger you are when you go into marriage, the more you are likely to divorce.

REFERENCE:

- BDHS (2000) Bangladesh Demographic and Health Survey 1999-2000. Preliminary Report, NIPORT *et al*, Dhaka.
- Brown, L., Gardner, R. and Hulwell, B. (1964). Beyond Malthus: Sixteen Dimensions of the Population Problem. Washington, D.C. World watch.
- Buckley, T. (2012). Physiological correlates of Bereavement and the impact of Bereavement Interventions. *Dialogues in Clinical Neuroscience*. 14(2):129-139. doi:10.31887/DCNS.2012.14.2/tbuckley
- Chen, Z., Ying, J., Ingles, J. *et al.*, (2020). Gender Differential impact of Bereavement on Health outcomes: Evidence from the China Health and Retirement Longitudinal Study, 2011-2015. *BMC Psychiatry*, 20, 514. <https://doi.org/10.1186/s12888-020-02916-2>
- Daily, G. Dasgupta, P. *et al.*, (1998). Food Production, Population Growth and the Environment. *Science*, 281: 1291-1292.
- Dreyer, T.F. (1931). The Bushmen-Hottentot-Strandlooper Tangle. *Transactions of the Royal Society of South Africa*, 20(1): 79-92. DOI:10.1080/00359193109518851
- Ehrlich, P. (1997). Food Security, Population and Environment: *Population and Development Review*, 19:1-32.
- Gleick, P. H. (1997). Human Population and Water Meeting Basic Needs in 21st Century. In: *Population, Environment and Development*. (eds). R. K. Pachaari, and I. F. Qureshy. Tata Energy Research Institute, New Delhi, India pp.15-34.
- Kendall, H. (1992). World Scientists' warning to humanity. Union of Concerned Scientists, Cambridge, MA: <http://www.ucsusa.org/ucs/about/page.cfm?pageID=1009>
- Maddison, A. (2001). *The World Economy: A Millennial Perspective*. Paris, France: The Development Center of the Organization for Economic Cooperation and Development.
- Orire, I. O. (2005). Fertility Change in Ilorin: A Time and Space Perspective. Unpublished M.Sc. Dissertation, Department of Geography, University of Ilorin, Ilorin, Nigeria.
- Orire, I. O. and Olorunfemi, J. F. (2017). Population Impact on Socio-Economic Development: Fertility in Focus. In: *Geography in Development: Issues and Perspectives*. Tilakasiri, S. L. (ed.). pp. 331- 342.
- Osoro, A.A. (1991). A Question of Dignity. Impact of Rapid Population Growth on Developing Countries. *Kenya Nursing Journal*, 19(1): 14. PubMed.gov
- Poston, D.L. and Bouvier, L.F. (2010). *Population and Society: An Introduction to Demography*. Cambridge University Press. The Edinburgh Building, Cambridge CB2 8RU, UK
- Ramadas, S. and Kuttichira, P. (2013). Bereavement Leading to Death. *Asian Journal of Psychiatry*, 6:184-185.
- Roser, M. (2013). Future Population Growth. Published online at OurWorldInData.org. Retrieved from:
- Shear, M.K., Ghesquiere, A., and Glickman, K. (2013). Bereavement and Complicated Grief. *Curr Psychiatry Rep.*, 15(11): 406.
- Speidel, J.J., Weiss, D.C., Ethelston, S.A. and Gilbert, S.M. (2009). Population Policies, Programmes and the Environment. *Philosophical Transactions of the Royal Society London B: Biological Sciences*, 364(1532): 3049-3065. doi:10.1098/rstb.2009.0162
- Stroebe, M., Stroebe, W., and Schut, H. (2001). Gender differences in Adjustment to Bereavement: An Empirical and Theoretical Review. *Rev. Gen. Psychol.*, 5(1): 62-83.
- Van Bavel, J. (2013). The World Population Explosion: Causes, Backgrounds and Projections for the Future. *Facts Views Vis Obgyn.*, 5(4): 281-291. www.ncbi.nlm.nih.gov/pmc/articles/PMC352021/
- Wesley, E. and Peterson, F. (2017). The Role of Population in Economic Growth. *SAGE Open*, 1-15.
- Wilson, E. O. (2002). *The Future of Life*. New York, NY: Alfred A. Knopf; 2002.
- World Bank (2017). World Development Indicators. Online at <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>
- UN, (2013). World Population Prospects. The 2012 Revision. Volume 1: Comprehensive Tables. Department of International Economic and Social Affairs, 1985, New York. <http://esa.un.org/wpp/>.
- UN, (2019). World Population Prospects 2019. Population Division. United Nations.
- UNESCO, (2010) Teaching and Learning for a Sustainable Future. Module 13, Population and Development, UNESCO Paris.